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Vitamin A Deficiency Among Children — Federated States of Micronesia, 2000

Vitamin A, a fat-soluble, heat-stable nutrient (retinol) derived from animal sources and certain fruits and vegetables, forms the basic component of retinal pigments and plays a vital role in optimal health, growth, and development. Vitamin A deficiency (VAD) (serum retinol ≤20 μg/dL [≤0.7 μmol/L] for subclinical VAD) can substantially increase the risk for childhood mortality from infectious and noninfectious causes (*1–3*). VAD impairs the mobilization and transport of iron and is usually associated with anemia and reduced growth (*4,5*). VAD is a major public health problem in parts of Africa, Asia, Latin America, and the Western Pacific (*1,6*). In Chuuk and Pohnpei, two of the four Federated States of Micronesia (FSM) (2000 population: 107,008), nutrition surveys during the early 1990s documented VAD prevalences among the highest in the world (CDC, unpublished data, 1991; U.S. Public Health Service, unpublished data, 1994). In response to these findings, FSM health authorities, with support of the United Nations Children's Fund (UNICEF), began distributing vitamin A supplements in 1993 and 1998 in Chuuk and Pohnpei, respectively. In November 1999, FSM requested assistance from CDC in VAD assessment surveys of children in Kosrae and Yap, the other two FSM states. This report summarizes levels of serum retinol and prevalence of VAD and other indicators of nutritional status among children aged 24–59 months in Kosrae and Yap. The findings indicated low serum retinol levels and high VAD prevalences but no substantial stunting or wasting. A comprehensive, long-term national strategy is needed in FSM to promote sustained improvement in vitamin A status.

FSM is an island nation in the western Pacific Ocean. Kosrae state is a single island divided into 21 enumeration districts. Yap comprises four large islands and 134 small islands, primarily atolls, and is divided into 93 villages. For logistic reasons, only the three large islands connected by bridges (Yap proper) were included in the survey. These islands represent approximately 62% of the Yap population.

During January–February 2000, FSM health authorities, UNICEF, and CDC surveyed children aged 24–59 months and their mothers or reproductive-aged female caregivers in Kosrae and Yap. A separate cluster survey was performed in each state. The sample size for each state was calculated to yield a prevalence estimate with 5% error assuming 50% VAD prevalence. Because of uneven village sizes (range: 157–537 residents per village in Kosrae and one–580 in Yap), clusters were selected using the proportionate-to-population size sampling method. Investigators selected 13 villages in Kosrae and 29 villages in Yap. In each village, all children aged 24–59 months identified from a comprehensive list of vaccination records were eligible for the survey. Children were

Vitamin A Deficiency — Continued

excluded who had moved into the village during the 6 months preceding the survey or had experienced fever or diarrhea during the preceding 24 hours or cough for ≥4 weeks. If more than one eligible child lived in a household, investigators randomly selected one for the survey.

Caregivers were asked about demographics, feeding history, availability of home garden, number of vitamin A-rich plants grown, and vitamin/mineral supplement intake for each child. Caregiver information included demographics, reproductive history, dietary and nutritional knowledge of vitamin A and iron, and vitamin/mineral supplement intake.

Child height and weight were measured to calculate degree of stunting (height-for-age Z-score, ≤2 standard deviations [SD] below the reference median) and wasting (weight-for-height Z-score, ≤2 SD below the reference median) based on World Health Organization (WHO)/CDC references. Blood was collected by venipuncture to assess serum retinol and hemoglobin. Hemoglobin levels were measured by the cyanmethemoglobin method using a portable HemoCue™* instrument. Children with hemoglobin <11.0 g/dL were considered anemic. Serum samples for retinol were analyzed at CDC using high-performance liquid chromatography under a strict quality-control protocol.

For each state's analysis, the survey sampling design was taken into account and the data were weighted to represent children aged 24–59 months. For Kosrae and Yap combined, the data were analyzed as a stratified cluster survey and weighted to represent the combined population of children aged 24–59 months. Because of the large proportion of children surveyed in each state (47.3% for Kosrae and 39.8% for Yap), the finite population correction was used to reduce the confidence interval.

A total of 270 children in Kosrae and 228 children in Yap was selected for the survey. Blood could not be collected from 13 children, leaving 267 children from Kosrae and 218 children from Yap included in these analyses. Only 485 children with retinol measurements were included in this report. Approximately half of these children were male, and they were distributed equally among ages 2, 3, and 4 years.

The mean serum retinol of all children surveyed was 20.4 μg/dL (18.0 μg/dL in Kosrae and 22.9 μg/dL in Yap) (Table 1). The prevalence of VAD among all children was 48.8% and was higher in Kosrae (63.3%) than Yap (33.8%). The prevalences of stunting (16.6%), wasting (3.8%), and anemia (11.2%) did not differ between the two states.

VAD risk factors among children for both states combined included residence in Kosrae, male sex, household size (>8 persons), maternal income (no income), education (<8 years), maternal VAD, type of first solid food (local food) given to the child, anemia in children, and vitamin A-rich plants (<2) grown in the garden. However, the specific risk factors for VAD varied between the two states. In Kosrae, male sex, family income (no income), and type of first solid food (local food) were associated with VAD. In Yap, the significant risk factors were outer island ethnicity, maternal education (<8 years), and vitamin A-rich plants (<2) grown in the garden. When stratified by each risk factor, all subgroups of children from Kosrae had VAD prevalence >37%, and on Yap all subgroups had VAD prevalence >17%.

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*Use of trade names and commercial sources is for identification only and does not imply endorsement by CDC or the U.S. Department of Health and Human Services.

Vitamin A Deficiency — Continued

TABLE 1. Estimated prevalence* of children aged 24–59 months with vitamin A deficiency (VAD), stunting, wasting, and anemia and mean serum retinol — Kosrae and Yap, Federated States of Micronesia, January–February 2000

Condition	Kosrae (n=267) %	Kosrae (n=267) (95% CI†)	Yap (n=218) %	Yap (n=218) (95% CI)	Total (n=485) %	Total (n=485) (95% CI)
VAD§	63.3	(57.3–69.4)	33.8	(27.8–39.8)	**48.8**	**(44.5–53.1)**
Stunting¶	17.1	(13.1–21.2)	16.2	(10.9–21.5)	**16.6**	**(13.3–19.9)**
Wasting**	4.8	(1.0– 8.7)	2.8	(0.0– 6.9)	**3.8**	**(1.0– 6.7)**
Anemia††	12.6	(8.3–16.9)	9.8	(5.8–13.8)	**11.2**	**(8.2–14.2)**
Mean serum retinol (μg/dL)	*18.0*	*(17.1–18.9)*	*22.9*	*(21.9– 23.9)*	***20.4***	***(19.8–21.1)***

* Computed to give each cluster an equal weight in the estimation of prevalence.
† Confidence interval.
§ Serum retinol ≤20 μg/dL or ≤0.7 μmol/L.
¶ Height-for-age ≤2 standard deviations (SD) below the World Health Organization (WHO)/CDC reference median.
** Weight-for-height ≤2 SD below WHO/CDC reference median.
†† Hemoglobin <11.0 g/dL.

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Editorial Note: The findings in this report indicate that VAD prevalence in virtually all subgroups of children examined in this survey was ≥20%. WHO considers VAD prevalence ≥20% among children aged 6–71 months a severe public health problem (*7*). Compared with a healthy U.S. population (*8*), the serum retinol distributions among children from Kosrae and Yap are substantially lower (Figure 1), underscoring the potential risk for increased morbidity and mortality.

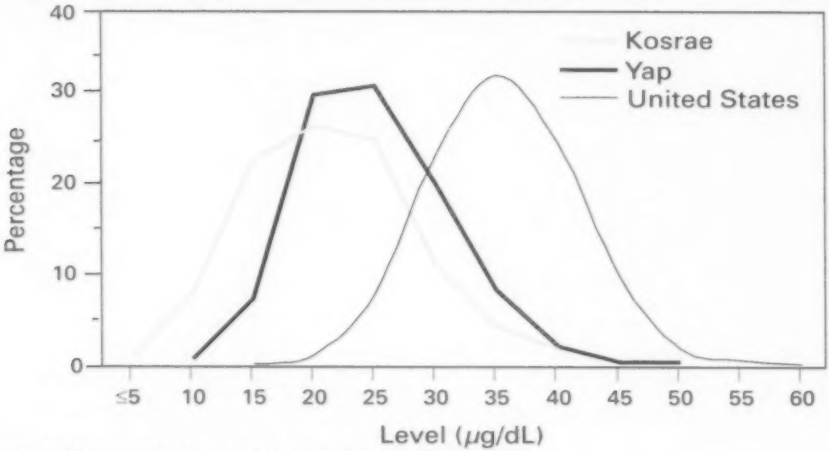
Children with VAD often are anemic, stunted, and occasionally wasted. However, in the population surveyed for this report, these indicators were not evident. The findings indicate relatively good nutritional status among these preschool-aged children. According to a proposed WHO classification for stunting and wasting among children aged <5 years, children from Kosrae and Yap have a low prevalence (<20%) of stunting and an acceptable prevalence (<5%) of wasting (*9*). These children also have lower prevalences of anemia than other Asia Pacific regions (*10*). This may be, in part, because of the absence of malaria.

The findings in this report are subject to at least one limitation. The survey lacked detailed dietary intake and medical data that would have provided a more complete assessment of the health status of each child.

To address severe VAD in children of Kosrae and Yap, vitamin A capsule distribution is the most practical immediate response. However, because of the magnitude and pervasiveness of VAD among preschool-aged children in all four FSM states and the likelihood that this problem extends to older children and adults, a comprehensive, long-term program is indicated. Although the risk factors for VAD identified in the survey do not fully explain the very low serum retinol distributions, they may be helpful in adjusting intervention programs to suit specific conditions in each state (e.g., promotion of vitamin A-rich plants in household gardens). A national strategy should be aimed at sustained improvement of vitamin A status of the population. Sustained correction of VAD may be achieved only by combining the supplementation effort among children with food

Vitamin A Deficiency — Continued

FIGURE 1. Percentage distribution of serum retinol levels among children aged 24–59 months in Kosrae and Yap, Federated States of Micronesia, January–February 2000, and among children aged 48–71 months in the United States, 1988–1994*



*Third National Health and Nutrition Examination Survey.

fortification, diversification of dietary supply and consumption patterns, or public health education, as appropriate.

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Measles Incidence Before and After Supplementary Vaccination Activities — Lusaka, Zambia, 1996–2000

Zambia is a sub-Saharan African country (2000 population: nine million) with approximately 10% of the population residing in the capital of Lusaka. In Zambia, measles is one of the five major causes of morbidity and mortality among children aged <5 years. During 1991–1999, the annual number of reported measles cases ranged from 1698 to 23,518. In August 1999, supplementary vaccination activities (SVAs) were conducted in Lusaka among children aged 9 months–4 years. This report summarizes measles incidence, measured by the number of patients presenting to selected medical facilities, before and after SVAs and suggests that substantial measles transmission continued despite this intervention. To improve measles control in Zambia, nationwide supplementary measles vaccination is planned for children aged 9 months–14 years in 2002.

The routine vaccination program in Zambia includes one dose of measles vaccine administered at age 9 months. Reported national measles vaccination coverage ranged from 93% in 1996 to 72% in 1999, with wide fluctuations among districts. In Lusaka, reported vaccination coverage decreased from >95% in 1996 to 54% in 1999 (Ministry of Health, Zambia, unpublished data, 1999).

To accelerate measles control, SVAs were conducted in four urban districts (Kabwe, Kitwe, Lusaka, and Ndola) that comprised approximately one fourth of the Zambian population. During August 20–23, 1999, measles vaccine for children aged 9–59 months, vitamin A for children aged 6–59 months, and oral poliovirus vaccine for children aged 0–59 months were administered during the second round of polio subnational immunization days. Measles vaccine was administered to 197,077 children regardless of prior measles vaccination or disease history. The reported measles vaccination coverage for the four urban districts combined was 81%; Lusaka district reported coverage of 83% (*1*).

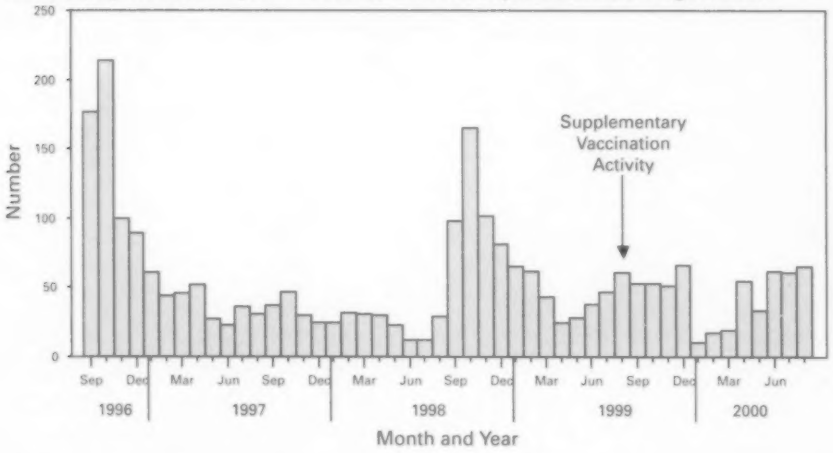
To assess the results of the 1999 campaign, a field investigation was conducted in Lusaka district. Attendance registers were reviewed for patients with measles seen during August 1996–September 2000 at the main city hospital and three health-care centers located in different areas of the city. Data on age, date of disease onset, date of admission, and mortality were abstracted. Because measles in partially immunized populations is a seasonal disease characterized by periodic epidemics, the impact of SVAs was assessed by comparing the annual number of measles cases, deaths, and the age distribution of these before and after SVAs. Three consecutive 12-month periods before SVAs were compared with one 11-month period after SVAs. The post-SVA period started 1 month after the vaccination campaign was conducted (i.e., September 23, 1999–August 22, 2000).

From September 23, 1996, through September 22, 1999, 2048 measles cases were recorded in Lusaka. The highest monthly incidence occurred during October 1996 and October 1998 (Figure 1). Case counts for the pre-SVA periods during 1997, 1998, and 1999 were 900, 333, and 815, respectively; 496 cases were recorded during the post-SVA period.

Of the 2048 patients with measles during the pre-SVA period, 869 (42%) were aged 1–4 years (Table 1). Following SVAs, among the 496 measles patients, 144 (29%) were aged 1–4 years (Chi-square test, $p<0.001$). The number of measles cases among persons aged ≥15 years increased in each successive study period (Table 1). The age distribution of measles patients was similar for both inpatients and outpatients. For the four study periods, clinical outcome (e.g., death) was available for 239 (27%) of 900 (1997),

Measles — Continued

FIGURE 1. Number of measles cases among persons presenting to selected health-care facilities, by month and year — Lusaka, Zambia, September 1996–August 2000



249 (75%) of 333 (1998), 539 (66%) of 815 (1999), and 294 (59%) of 496 (2000) patients, respectively. Among patients with known outcome, 15 (6%), 22 (9%), 42 (8%), and 18 (6%) died during the four study periods. From September 23, 1996, through September 22, 1998, no measles deaths were recorded among persons aged ≥10 years; two deaths and three deaths were recorded in this age group in the two latter study periods, respectively (Table 1).

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Editorial Note: During 1989–1990, the World Health Assembly and the World Summit for Children set goals of reducing measles morbidity by 90% and mortality by 95% compared with prevaccine estimates (*2,3*). Despite these goals and the existence of safe and effective measles vaccines for approximately 35 years, an estimated 30 million cases and 875,000 deaths are attributed to measles each year (*4*). In March 2001, the World Health Organization (WHO)/United Nations Children's Fund Global Strategic Plan established a goal of reducing global measles deaths by 50% by 2005 compared with 1999 levels (*5*). Strategies to decrease measles deaths include 1) achieving and sustaining high population immunity through vaccination; 2) enhancing measles surveillance with integration of epidemiologic and laboratory surveillance; and 3) improving measles case management. The plan recommends that a second opportunity for measles vaccination be offered to all children either through regular SVAs or as a second dose in the routine vaccination schedule if coverage with the first dose of measles vaccine is >90%.

Although SVAs in Lusaka did not have a major impact on measles morbidity and mortality during the 11-month period following the intervention, the expected seasonal peak during September–December 1999 appears to have been blunted and the propor-

TABLE 1. Number and percentage of measles cases and deaths among persons presenting to selected health-care facilities, by year — Lusaka, Zambia, September 1996–August 2000

	Sep 23, 1996–Sep 22, 1997				Sep 23, 1997–Sep 22, 1998				Sep 23, 1998–Sep 22, 1999				Sep 23, 1999–Aug 22, 2000				Total	
	Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases		Deaths		Cases	Deaths
Age group (yrs)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	No.
<1	350	(39)	7	(47)	110	(33)	9	(41)	281	(35)	20	(48)	176	(36)	8	(44)	**917**	**44**
1–4	381	(42)	6	(40)	148	(45)	12	(55)	340	(42)	17	(41)	144	(29)	6	(33)	**1013**	**41**
5–9	95	(11)	2	(13)	42	(12)	1	(4)	99	(12)	3	(7)	99	(20)	1	(6)	**335**	**7**
10–14	65	(7)	0		21	(6)	0		60	(7)	1	(2)	36	(7)	1	(6)	**182**	**2**
15–19	6	(1)	0		4	(1)	0		18	(2)	1	(2)	16	(3)	2	(11)	**44**	**3**
≥20	3	(0)	0		8	(3)	0		17	(2)	0		25	(5)	0		**53**	**0**
Total	**900**	**(100)**	**15**	**(100)**	**333**	**(100)**	**22**	**(100)**	**815**	**(100)**	**42**	**(100)**	**496**	**(100)**	**18**	**(100)**	2544	97

Measles — Continued

tion of cases among persons aged 1–4 years was reduced. SVAs had limited impact for two major reasons. First, vaccination coverage during SVAs was <85%, and reported coverage may have overestimated actual coverage. In Burkina Faso, cluster surveys in six urban districts after SVAs in 1998 indicated that measles vaccination coverage was 15%–52% lower than reported coverage (*6*). Second, routine coverage declined during 1997–1999. Conducting SVAs in a setting where routine coverage is declining results in an increase in the number of susceptible infants.

Other possible reasons for the limited impact of SVAs in Lusaka are 1) only children aged 9–59 months were targeted for vaccination, and approximately 20% of reported cases occurred among persons aged ≥5 years; and 2) SVAs were limited to urban areas. Preliminary data suggest that, because of the high contagiousness of measles and migration of susceptible persons from rural areas, targeted urban campaigns have limited impact on transmission, especially during epidemics (World Health Organization Office for Eastern Africa, unpublished data, 1999).

At least four factors contributed to low coverage during SVAs in Lusaka. First, measles vaccine and injection equipment arrived late (1 day before the start of the second round of polio subnational immunization days). Second, donor funds for operational costs were delayed, resulting in insufficient funds for personnel and fewer vaccination posts. Third, health-care workers went on strike on one of the campaign days because of nonpayment of the full government allowances. Finally, supervision and monitoring were inadequate at the central and district levels (*1*).

During the 11-month period following SVAs, six measles deaths (33% of the annual total) occurred among children who should have received measles vaccination during the campaign. The increase in the number of measles cases among older persons in the latter two study periods may be the result of migration of susceptible persons into Lusaka or changes in use of health-care facilities included in the study.

Improvements in the vaccination infrastructure in Zambia, a reversal of the declining trend in routine vaccination coverage, improvements in monitoring of coverage, high coverage (≥95%) in future SVAs that target a wider age group and geographic area, and strengthening of surveillance are needed to decrease measles-associated morbidity and mortality in Zambia. Advocacy and improved partner coordination are needed to further reduce measles morbidity and mortality.

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Notice to Readers

National HIV Testing Day — June 27, 2001

The National Association of People with AIDS will sponsor the 7th annual National HIV Testing Day on June 27. Testing Day is a nationwide campaign promoting human immunodeficiency virus (HIV) education and voluntary HIV counseling, testing, and referral to encourage persons at risk for HIV infection to know their HIV status and reduce their risks for HIV transmission.

Public health and other partners are encouraged to support community HIV education and counseling, testing, and referral efforts during the week of June 27. Activities can include sponsoring mobile HIV counseling, testing, and referral units; participating in health fairs where HIV education, counseling, testing, and referral are offered; and partnering with local media to promote HIV-prevention and testing messages.

Additional information about HIV counseling, testing, and referral services is available at http://www.hivtest.org.

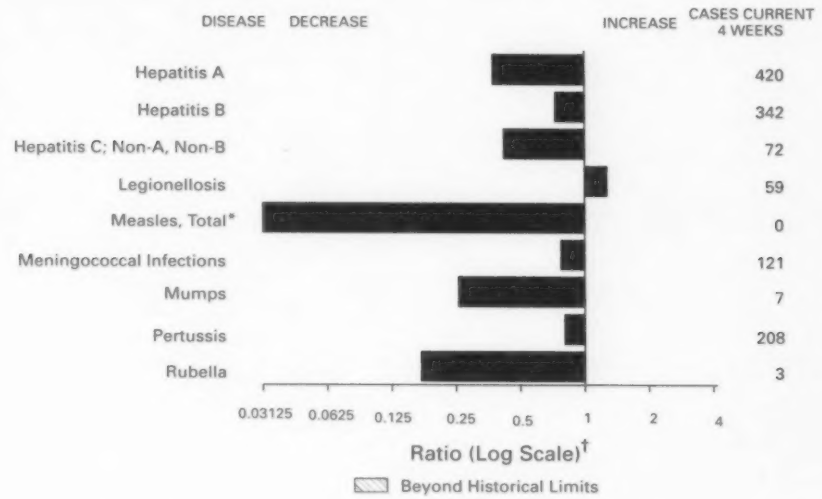
Notice to Readers

Availability of Health Information for International Travel

CDC's Division of Global Migration and Quarantine (DQ), National Center for Infectious Diseases has released the 2001–2002 edition of *Health Information for International Travel* (The Yellow Book). The new edition contains updated vaccination information; updated information on malaria risk and prophylaxis (by country); updated and revised disease-specific text and tables; new sections on altitude sickness and international adoption; updated country listings; and improved maps and indexing. The Yellow Book can be purchased from the Public Health Foundation, telephone (877) 252-1200 or at http://bookstore.phf.org*. DQ will no longer distribute the book.

*References to sites of non-CDC organizations on the World-Wide Web are provided as a service to *MMWR* readers and do not constitute or imply endorsement of these organizations or their programs by CDC or the U.S. Department of Health and Human Services. CDC is not responsible for the content of pages found at these sites.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals ending June 16, 2001, with historical data



* No measles cases were reported for the current 4-week period yielding a ratio for week 24 of zero (0).

† Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary of provisional cases of selected notifiable diseases, United States, cumulative, week ending June 16, 2001 (24th Week)

	Cum. 2001		Cum. 2001
Anthrax	-	Poliomyelitis, paralytic	-
Brucellosis*	26	Psittacosis*	4
Cholera	2	Q fever*	7
Cyclosporiasis*	70	Rabies, human	-
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	107
Ehrlichiosis: human granulocytic (HGE)*	28	Rubella, congenital syndrome	-
human monocytic (HME)*	16	Streptococcal disease, invasive, group A	1,791
Encephalitis: California serogroup viral*	-	Streptococcal toxic-shock syndrome*	26
eastern equine*	-	Syphilis, congenital†	84
St. Louis*	-	Tetanus	12
western equine*	-	Toxic-shock syndrome	58
Hansen disease (leprosy)*	28	Trichinosis	5
Hantavirus pulmonary syndrome*†	4	Tularemia*	25
Hemolytic uremic syndrome, postdiarrheal*	31	Typhoid fever	106
HIV infection, pediatric*†	84	Yellow fever	-
Plague	-		

-: No reported cases.
*Not notifiable in all states.
†Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP). Last update May 29, 2001.
§Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	AIDS		Chlamydia†		Cryptosporidiosis		*Escherichia coli* O157:H7*			
							NETSS		PHLIS	
	Cum. 2001§	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	15,380	16,292	292,245	314,493	692	701	622	913	447	792
NEW ENGLAND	586	987	10,336	10,559	29	44	67	99	48	101
Maine	18	16	572	625	3	9	10	6	7	6
N.H.	14	13	563	476	1	2	12	5	7	8
Vt.	10	1	270	247	13	13	2	4	1	6
Mass.	332	669	4,673	4,496	7	12	27	51	21	45
R.I.	44	40	1,267	1,196	3	2	4	4	2	6
Conn.	168	248	2,991	3,519	2	6	12	29	10	30
MID. ATLANTIC	3,108	3,928	32,184	29,725	77	134	48	123	38	91
Upstate N.Y.	182	181	5,435	524	36	34	37	87	25	38
N.Y. City	1,587	2,313	13,310	12,755	36	77	4	8	3	5
N.J.	746	832	4,079	5,580	2	5	7	28	10	25
Pa.	593	602	9,360	10,866	3	18	N	N	-	23
E.N. CENTRAL	1,163	1,590	41,957	53,815	222	155	148	176	99	125
Ohio	198	196	5,226	14,153	51	22	42	27	33	28
Ind.	119	146	6,783	5,985	27	11	26	17	11	23
Ill.	558	1,002	11,523	15,749	1	22	30	53	19	36
Mich.	224	184	13,968	10,331	61	23	24	30	19	23
Wis.	64	62	4,457	7,597	82	77	26	49	17	15
W.N. CENTRAL	355	358	15,280	17,697	40	49	78	112	74	127
Minn.	67	78	2,752	3,645	-	11	30	26	37	45
Iowa	40	36	1,490	2,366	18	14	13	18	7	14
Mo.	168	149	5,463	5,992	7	7	14	32	18	30
N. Dak.	1	-	445	419	3	3	1	6	3	6
S. Dak.	9	3	840	815	4	5	6	3	5	9
Nebr.	27	25	1,546	1,679	8	6	6	19	-	18
Kans.	43	67	2,744	2,781	-	3	8	8	4	5
S. ATLANTIC	4,910	4,276	57,213	57,839	139	104	69	73	29	61
Del.	84	77	1,335	1,364	1	3	-	1	-	-
Md.	591	455	5,455	5,924	27	6	4	10	-	1
D.C.	360	315	1,515	1,445	9	4	-	-	U	U
Va.	388	295	7,983	7,313	8	4	18	15	8	15
W. Va.	36	27	1,076	968	-	3	2	3	-	3
N.C.	212	255	7,787	9,904	14	9	24	14	11	11
S.C.	340	293	5,393	4,539	-	-	2	4	2	5
Ga.	579	429	11,449	11,626	46	55	10	9	2	12
Fla.	2,321	2,130	15,220	14,756	34	20	9	17	6	14
E.S. CENTRAL	836	767	21,233	22,770	16	22	28	42	18	31
Ky.	181	98	3,920	3,698	1	1	8	14	8	13
Tenn.	249	314	6,769	6,611	3	5	13	16	9	13
Ala.	182	206	5,350	6,992	5	9	6	3	-	3
Miss.	224	149	5,194	5,469	7	7	1	9	1	2
W.S. CENTRAL	1,617	1,475	46,627	47,646	16	35	31	73	39	96
Ark.	88	92	3,364	2,860	2	1	2	30	-	26
La.	403	265	7,768	8,662	7	8	2	6	14	18
Okla.	90	112	4,953	4,181	5	3	10	7	10	6
Tex.	1,035	1,006	30,542	31,943	2	23	17	30	15	46
MOUNTAIN	636	552	15,646	18,587	51	34	69	75	40	53
Mont.	12	7	1,014	730	5	5	5	11	-	-
Idaho	14	11	778	864	6	3	10	9	-	5
Wyo.	1	2	368	345	-	5	1	4	1	5
Colo.	126	130	1,441	5,617	16	8	29	28	20	17
N. Mex.	50	58	2,542	2,324	9	1	6	3	2	3
Ariz.	258	170	6,631	5,803	2	2	10	15	9	16
Utah	53	57	697	1,171	11	8	5	4	7	5
Nev.	122	117	2,175	1,733	2	2	3	1	1	2
PACIFIC	2,169	2,359	51,769	55,855	102	124	84	140	62	107
Wash.	247	243	6,370	5,856	N	U	20	38	13	59
Oreg.	104	86	1,351	3,220	5	6	19	21	13	24
Calif.	1,787	1,962	42,423	44,017	95	118	42	72	34	16
Alaska	9	5	1,166	1,166	-	-	1	1	-	1
Hawaii	22	63	459	1,596	2	-	2	8	2	7
Guam	9	13	-	240	-	-	N	N	U	U
P.R.	535	431	2,154	U	-	-	-	5	U	U
V.I.	2	18	53	-	-	-	-	-	U	U
Amer. Samoa	-	-	U	U	U	U	U	U	U	U
C.N.M.I.	-	-	54	U	-	U	-	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases. C.N.M.I.: Commonwealth of Northern Mariana Islands.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

† Chlamydia refers to genital infections caused by *C. trachomatis*. Totals reported to the Division of STD Prevention, NCHSTP.

§ Updated monthly from reports to the Division of HIV/AIDS Prevention — Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention. Last update May 29, 2001.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	Gonorrhea		Hepatitis C; Non-A, Non-B		Legionellosis		Listeriosis	Lyme Disease	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	132,862	155,192	1,015	1,585	307	324	173	1,349	3,461
NEW ENGLAND	2,831	2,909	13	13	18	23	20	395	762
Maine	62	35	-	1	1	2	-	-	-
N.H.	61	49	-	-	4	2	-	52	36
Vt.	38	29	5	3	4	1	-	1	7
Mass.	1,431	1,145	8	6	4	10	12	51	297
R.I.	326	293	-	3	1	3	1	47	26
Conn.	913	1,358	-	-	4	5	7	244	396
MID. ATLANTIC	14,622	16,529	35	340	31	82	28	581	2,099
Upstate N.Y.	3,375	2,951	23	14	20	23	12	412	495
N.Y. City	5,569	5,326	-	-	4	11	5	1	75
N.J.	1,346	3,120	-	303	4	8	6	83	871
Pa.	4,332	5,132	12	23	3	40	5	85	658
E.N. CENTRAL	22,517	30,660	103	120	79	87	22	46	177
Ohio	3,322	8,025	5	3	44	35	5	35	15
Ind.	2,787	2,714	1	-	7	9	3	1	4
Ill.	7,002	9,540	10	12	-	8	-	-	11
Mich.	8,024	7,186	87	105	19	17	13	-	7
Wis.	1,382	3,195	-	-	9	18	1	10	140
W.N. CENTRAL	6,405	7,563	357	274	28	17	5	51	45
Minn.	871	1,456	1	4	6	1	-	30	15
Iowa	392	481	-	1	5	3	-	8	-
Mo.	3,284	3,661	351	263	10	10	2	9	16
N. Dak.	16	33	-	-	1	-	-	-	-
S. Dak.	129	122	-	-	1	1	-	-	-
Nebr.	540	627	1	2	4	-	1	1	2
Kans.	1,173	1,183	4	4	1	2	2	3	12
S. ATLANTIC	34,590	40,828	51	39	57	56	29	210	301
Del.	729	769	-	2	-	4	-	6	59
Md.	3,090	4,010	10	3	14	13	2	139	180
D.C.	1,282	1,023	-	1	2	-	-	7	1
Va.	4,007	4,649	-	1	7	7	5	40	38
W. Va.	278	309	6	5	N	N	4	1	8
N.C.	6,488	8,371	8	13	5	8	-	6	8
S.C.	3,910	4,336	3	1	1	2	2	2	2
Ga.	6,214	7,148	-	2	4	4	8	-	-
Fla.	8,592	10,213	24	11	24	18	8	9	5
E.S. CENTRAL	13,577	16,057	105	217	28	10	8	8	15
Ky.	1,527	1,541	3	17	7	5	2	2	4
Tenn.	4,407	5,078	30	49	12	2	3	4	9
Ala.	4,321	5,347	2	7	7	2	3	2	1
Miss.	3,322	4,091	70	144	2	1	-	-	1
W.S. CENTRAL	22,400	24,594	161	471	5	13	5	7	23
Ark.	2,064	1,539	3	3	-	-	1	-	-
La.	5,330	6,107	74	244	2	6	-	1	2
Okla.	2,237	1,808	3	2	3	1	1	-	-
Tex.	12,769	15,140	81	222	-	6	3	6	21
MOUNTAIN	4,638	4,741	133	32	25	16	18	5	1
Mont.	53	25	-	2	-	-	-	-	-
Idaho	33	43	1	3	1	3	1	2	-
Wyo.	29	30	101	1	1	-	1	1	1
Colo.	1,416	1,496	11	5	7	6	3	1	-
N. Mex.	410	491	10	6	1	1	3	-	-
Ariz.	1,842	1,903	6	11	9	2	4	-	-
Utah	62	119	1	-	4	4	1	-	-
Nev.	793	634	3	4	2	-	5	1	-
PACIFIC	11,282	11,311	57	79	36	20	38	46	38
Wash.	1,368	1,008	15	10	6	8	2	2	-
Oreg.	209	404	8	15	N	N	1	3	3
Calif.	9,432	9,540	34	54	29	12	34	41	34
Alaska	151	151	-	-	-	-	-	-	1
Hawaii	122	208	-	-	1	-	1	N	N
Guam	-	25	-	1	-	-	-	-	-
P.R.	509	255	1	1	2	-	-	N	N
V.I.	6	-	-	-	-	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	-	U	U
C.N.M.I.	3	U	-	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	Malaria		Rabies, Animal		Salmonellosis*			
					NETSS		PHLIS	
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	389	526	2,619	3,009	11,326	13,349	9,222	11,912
NEW ENGLAND	30	21	275	336	869	798	806	814
Maine	3	4	34	65	96	55	74	35
N.H.	2	1	7	4	71	53	65	51
Vt.	-	2	35	32	35	51	34	51
Mass.	9	9	88	108	485	467	393	459
R.I.	3	3	26	20	51	32	67	54
Conn.	13	2	85	107	131	140	173	164
MID. ATLANTIC	68	113	382	518	1,133	2,026	1,485	2,070
Upstate N.Y.	19	23	294	314	414	449	376	536
N.Y. City	35	59	11	4	389	527	470	542
N.J.	8	14	70	69	204	526	218	404
Pa.	6	17	7	131	126	524	421	588
E.N. CENTRAL	44	62	23	32	1,660	1,913	1,232	1,213
Ohio	9	6	8	5	587	458	412	434
Ind.	10	3	1	-	166	203	141	241
Ill.	1	34	3	1	383	603	255	1
Mich.	16	13	11	18	302	379	275	401
Wis.	8	6	-	8	222	270	149	136
W.N. CENTRAL	16	24	152	265	730	841	750	989
Minn.	6	7	18	36	211	170	279	271
Iowa	1	1	31	38	122	107	95	118
Mo.	5	5	13	14	196	279	247	341
N. Dak.	-	2	20	69	14	25	22	37
S. Dak.	-	-	21	55	49	34	39	41
Nebr.	2	3	1	-	55	81	-	68
Kans.	2	6	48	53	83	145	68	113
S. ATLANTIC	110	117	961	1,056	2,725	2,246	1,642	1,914
Del.	1	3	18	20	32	39	33	49
Md.	43	38	114	211	283	297	262	296
D.C.	4	6	-	-	32	26	U	U
Va.	24	26	204	265	450	320	328	327
W. Va.	1	-	60	56	41	54	48	54
N.C.	2	10	275	264	421	314	272	306
S.C.	4	1	55	56	290	200	272	165
Ga.	8	4	135	123	393	373	351	534
Fla.	23	29	100	61	783	623	76	183
E.S. CENTRAL	10	17	87	86	672	644	416	534
Ky.	2	3	10	12	126	142	81	100
Tenn.	5	5	61	47	189	157	187	236
Ala.	3	8	16	26	215	179	109	167
Miss.	-	1	-	-	142	166	39	31
W.S. CENTRAL	6	32	481	468	1,048	1,532	898	902
Ark.	3	1	-	-	162	156	92	107
La.	1	4	-	-	240	260	214	187
Okla.	1	3	39	33	100	129	81	104
Tex.	1	24	442	435	546	987	511	504
MOUNTAIN	22	20	105	113	826	1,060	607	988
Mont.	2	1	16	30	30	50	-	-
Idaho	2	-	1	1	47	58	4	49
Wyo.	-	-	16	31	28	27	22	25
Colo.	10	11	-	-	229	334	200	314
N. Mex.	1	-	4	7	107	95	75	93
Ariz.	2	2	66	41	237	237	206	258
Utah	3	3	1	2	88	153	77	154
Nev.	2	3	1	1	60	106	23	95
PACIFIC	83	120	153	136	1,663	2,289	1,386	2,488
Wash.	3	9	-	-	189	181	205	269
Oreg.	5	22	-	-	77	142	125	185
Calif.	71	83	120	113	1,312	1,863	930	1,931
Alaska	1	-	33	23	19	23	2	19
Hawaii	3	6	-	-	66	80	124	84
Guam	-	-	-	-	-	13	U	U
P.R.	3	4	61	30	274	205	U	U
V.I.	-	-	-	-	-	-	U	U
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	5	U	U	U

N: Not notifiable. U: Unavailable. -: No reported cases.

* Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE II. (Cont'd) Provisional cases of selected notifiable diseases, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	Shigellosis*				Syphilis (Primary & Secondary)		Tuberculosis	
	NETSS		PHLIS					
	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000
UNITED STATES	5,587	8,637	2,792	4,869	2,439	2,861	4,857	6,040
NEW ENGLAND	87	155	86	139	21	40	193	171
Maine	4	5	1	-	-	1	5	3
N.H.	2	1	2	6	1	1	9	4
Vt.	3	1	2	-	2	-	2	3
Mass.	57	112	52	93	11	27	106	101
R.I.	7	10	11	13	2	3	19	17
Conn.	14	26	18	27	5	8	52	43
MID. ATLANTIC	511	1,268	343	774	192	134	1,005	987
Upstate N.Y.	277	392	15	147	6	6	134	122
N.Y. City	154	582	196	366	115	57	529	533
N.J.	40	185	67	158	43	29	225	232
Pa.	40	109	65	103	28	42	117	100
E.N. CENTRAL	869	1,744	423	540	405	619	521	576
Ohio	370	115	188	96	41	34	79	125
Ind.	117	605	19	58	81	205	38	56
Ill.	164	480	105	2	106	214	284	272
Mich.	139	381	98	353	167	136	88	84
Wis.	79	163	13	31	10	30	32	39
W.N. CENTRAL	625	715	461	635	28	39	187	227
Minn.	217	136	240	220	12	4	100	76
Iowa	133	181	84	149	1	10	9	19
Mo.	123	301	81	209	7	20	52	83
N. Dak.	13	2	2	3	-	-	3	-
S. Dak.	67	2	37	1	-	-	6	9
Nebr.	32	28	-	16	-	2	17	10
Kans.	40	65	17	37	8	3	-	30
S. ATLANTIC	876	988	260	383	924	929	1,001	1,210
Del.	4	7	4	6	5	4	9	2
Md.	52	46	26	22	108	138	77	107
D.C.	23	13	U	U	19	20	15	3
Va.	71	128	27	133	63	63	103	128
W. Va.	4	3	6	3	-	1	14	15
N.C.	170	56	78	28	217	274	149	160
S.C.	90	57	46	46	123	99	96	135
Ga.	99	115	57	90	129	160	173	250
Fla.	363	563	16	55	260	170	365	410
E.S. CENTRAL	573	416	223	283	275	419	307	416
Ky.	221	108	96	43	22	48	42	47
Tenn.	41	194	38	216	151	258	99	165
Ala.	122	23	78	21	51	54	129	133
Miss.	189	91	11	3	51	59	37	71
W.S. CENTRAL	903	1,478	650	431	317	383	516	922
Ark.	278	94	155	24	19	46	63	90
La.	104	139	81	75	61	88	-	71
Okla.	18	51	2	17	34	65	66	58
Tex.	503	1,194	412	315	203	184	387	703
MOUNTAIN	346	401	206	262	97	100	174	220
Mont.	-	3	-	-	-	-	-	6
Idaho	16	28	-	20	-	-	4	4
Wyo.	-	2	-	2	-	1	1	1
Colo.	67	77	54	35	17	5	53	30
N. Mex.	53	42	33	24	9	8	11	24
Ariz.	163	144	89	94	61	82	65	82
Utah	22	34	22	37	6	1	9	22
Nev.	25	71	8	50	4	3	31	51
PACIFIC	797	1,472	140	1,422	180	198	953	1,311
Wash.	75	298	76	275	30	31	93	106
Oreg.	24	92	46	57	4	8	46	40
Calif.	684	1,056	-	1,071	144	158	777	1,054
Alaska	3	6	1	3	-	-	18	49
Hawaii	11	20	17	16	2	1	20	62
Guam	-	18	U	U	-	2	-	27
P.R.	6	14	U	U	129	82	51	61
V.I.	-	-	U	U	-	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U
C.N.M.I.	4	U	U	U	-	U	19	U

N: Not notifiable. U: Unavailable. -: No reported cases.

*Individual cases can be reported through both the National Electronic Telecommunications System for Surveillance (NETSS) and the Public Health Laboratory Information System (PHLIS).

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	*H. influenzae*, invasive		Hepatitis (Viral), By Type				Measles (Rubeola)					
			A		B		Indigenous		Imported*		Total	
	Cum. 2001†	Cum. 2000	Cum. 2001	Cum. 2000	Cum. 2001	Cum. 2000	2001	Cum. 2001	2001	Cum. 2001	Cum. 2001	Cum. 2000
UNITED STATES	660	642	4,170	5,902	2,787	3,159	-	38	-	22	60	44
NEW ENGLAND	34	49	193	145	42	49	-	3	-	1	4	3
Maine	1	1	5	7	5	5	-	-	-	-	-	-
N.H.	-	8	5	13	10	9	-	-	-	-	-	-
Vt.	1	3	5	3	2	5	-	1	-	-	1	3
Mass.	24	27	56	59	3	3	-	2	-	1	3	-
R.I.	2	1	8	7	10	9	-	-	-	-	-	-
Conn.	6	9	115	56	12	18	-	-	-	-	-	-
MID. ATLANTIC	78	115	366	592	411	552	-	2	-	5	7	11
Upstate N.Y.	33	41	111	105	63	58	-	1	-	4	5	-
N.Y. City	24	33	158	239	244	258	-	-	-	-	-	10
N.J.	20	23	70	96	64	92	-	-	-	1	1	-
Pa.	1	18	27	152	40	144	-	1	-	-	1	1
E.N. CENTRAL	85	96	467	770	346	344	-	-	-	10	10	6
Ohio	41	31	111	134	59	58	-	-	-	3	3	2
Ind.	22	10	42	22	14	26	-	-	-	4	4	-
Ill.	10	35	133	331	51	44	-	-	-	3	3	3
Mich.	6	7	153	238	222	200	-	-	-	-	-	1
Wis.	6	13	28	45	-	16	-	-	-	-	-	-
W.N. CENTRAL	30	29	189	418	102	132	-	4	-	-	4	1
Minn.	15	16	14	113	12	16	-	2	-	-	2	1
Iowa	-	-	17	42	12	15	-	-	-	-	-	-
Mo.	10	8	54	185	55	66	-	2	-	-	2	-
N. Dak.	3	1	1	-	-	2	-	-	-	-	-	-
S. Dak.	-	-	1	-	1	-	-	-	-	-	-	-
Nebr.	1	3	22	19	11	22	-	-	-	-	-	-
Kans.	1	1	80	59	11	11	-	-	-	-	-	-
S. ATLANTIC	213	150	880	575	600	524	-	3	-	1	4	-
Del.	-	-	-	9	-	7	-	-	-	-	-	-
Md.	46	42	122	70	68	66	-	2	-	1	3	-
D.C.	-	-	21	11	7	16	-	-	-	-	-	-
Va.	16	28	62	67	62	72	-	-	-	-	-	-
W. Va.	5	4	6	39	14	6	-	-	-	-	-	-
N.C.	28	13	55	87	99	123	-	-	-	-	-	-
S.C.	5	4	26	23	6	4	U	-	U	-	-	-
Ga.	57	42	344	80	160	90	-	1	-	-	1	-
Fla.	56	17	244	189	184	140	-	-	-	-	-	-
E.S. CENTRAL	51	30	154	229	187	217	-	2	-	-	2	-
Ky.	2	11	26	26	17	45	-	2	-	-	2	-
Tenn.	25	12	70	83	91	94	-	-	-	-	-	-
Ala.	23	5	50	29	41	25	-	-	-	-	-	-
Miss.	1	2	8	91	38	53	-	-	-	-	-	-
W.S. CENTRAL	24	36	591	1,080	332	489	-	1	-	-	1	-
Ark.	-	-	31	85	47	48	-	-	-	-	-	-
La.	3	12	46	44	26	72	-	-	-	-	-	-
Okla.	21	22	81	136	47	64	-	-	-	-	-	-
Tex.	-	2	433	815	212	305	-	1	-	-	1	-
MOUNTAIN	95	68	389	404	256	229	-	-	-	1	1	11
Mont.	-	-	5	2	2	3	-	-	-	-	-	-
Idaho	1	2	35	15	6	4	-	-	-	1	1	-
Wyo.	4	1	16	3	16	-	-	-	-	-	-	-
Colo.	23	13	34	90	53	44	-	-	-	-	-	2
N. Mex.	12	15	13	39	69	71	-	-	-	-	-	-
Ariz.	42	31	213	191	78	74	-	-	-	-	-	-
Utah	6	4	35	30	13	12	-	-	-	-	-	3
Nev.	7	2	38	34	19	21	U	-	U	-	-	6
PACIFIC	50	69	941	1,689	511	623	-	23	-	4	27	12
Wash.	1	3	46	141	49	31	-	13	-	2	15	3
Oreg.	14	21	39	111	28	48	-	1	-	-	1	-
Calif.	31	25	844	1,416	428	533	U	8	U	1	9	7
Alaska	3	2	12	10	4	4	-	-	-	-	-	1
Hawaii	1	18	-	11	2	7	-	1	-	1	2	1
Guam	-	1	-	1	-	9	U	-	U	-	-	-
P.R.	1	3	52	157	93	122	-	-	-	-	-	-
V.I.	-	-	-	-	-	-	U	-	U	-	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	-	U	19	U	U	-	U	-	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.
*For imported measles, cases include only those resulting from importation from other countries.
† Of 142 cases among children aged <5 years, serotype was reported for 64, and of those, nine were type b.

TABLE III. (Cont'd) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending June 16, 2001, and June 17, 2000 (24th Week)

Reporting Area	Meningococcal Disease		Mumps			Pertussis			Rubella		
	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000	2001	Cum. 2001	Cum. 2000
UNITED STATES	1,224	1,223	2	80	184	60	1,948	2,543	-	11	72
NEW ENGLAND	75	67	-	-	2	2	211	703	-	-	10
Maine	1	5	-	-	-	-	-	14	-	-	-
N.H.	9	6	-	-	-	1	19	61	-	-	1
Vt.	4	2	-	-	-	-	22	142	-	-	-
Mass.	42	40	-	-	-	1	161	449	-	-	8
R.I.	2	4	-	-	1	-	1	8	-	-	-
Conn.	17	10	-	-	1	-	8	29	-	-	1
MID. ATLANTIC	93	133	-	5	12	3	140	228	-	4	7
Upstate N.Y.	39	34	-	1	5	3	100	115	-	1	1
N.Y. City	23	28	-	4	4	-	23	39	-	2	6
N.J.	25	23	-	-	-	-	8	-	-	1	-
Pa.	6	48	-	-	3	-	9	74	-	-	-
E.N. CENTRAL	163	213	-	9	17	13	238	291	-	3	-
Ohio	57	43	-	1	7	11	145	160	-	-	-
Ind.	32	24	-	1	-	1	20	25	-	1	-
Ill.	20	57	-	6	5	-	26	23	-	2	-
Mich.	27	68	-	1	4	1	23	29	-	-	-
Wis.	27	21	-	-	1	-	24	54	-	-	-
W.N. CENTRAL	88	81	-	7	10	-	99	120	-	2	1
Minn.	13	7	-	2	-	-	31	56	-	-	-
Iowa	19	18	-	-	5	-	10	17	-	1	-
Mo.	30	40	-	-	2	-	40	23	-	-	-
N. Dak.	5	2	-	-	-	-	-	1	-	-	-
S. Dak.	4	5	-	-	-	-	3	3	-	-	-
Nebr.	8	4	-	1	1	-	2	3	-	-	1
Kans.	9	5	-	4	2	-	13	17	-	1	-
S. ATLANTIC	227	169	1	17	28	7	106	184	-	1	31
Del.	-	-	-	-	-	-	-	4	-	-	-
Md.	29	16	-	4	6	-	16	46	-	-	-
D.C.	-	-	-	-	-	-	1	1	-	-	-
Va.	25	29	-	2	5	-	12	20	-	-	-
W. Va.	6	7	-	-	-	-	1	-	-	-	-
N.C.	48	29	-	1	3	3	39	49	-	-	23
S.C.	21	13	U	1	9	U	19	16	U	-	6
Ga.	32	32	-	7	2	2	6	20	-	-	-
Fla.	66	43	1	2	3	2	12	28	-	1	2
E.S. CENTRAL	81	88	-	2	4	-	42	50	-	-	4
Ky.	14	17	-	1	-	-	11	27	-	-	1
Tenn.	30	38	-	-	2	-	17	11	-	-	-
Ala.	29	25	-	-	2	-	11	9	-	-	3
Miss.	8	8	-	1	-	-	3	3	-	-	-
W.S. CENTRAL	160	139	-	6	21	13	95	109	-	-	6
Ark.	10	6	-	1	1	-	4	11	-	-	1
La.	52	34	-	2	4	-	2	7	-	-	1
Okla.	18	21	-	-	-	-	1	9	-	-	-
Tex.	80	78	-	3	16	13	88	82	-	-	4
MOUNTAIN	88	58	-	7	13	12	859	358	-	-	1
Mont.	2	1	-	-	1	-	6	7	-	-	-
Idaho	6	6	-	-	-	3	161	41	-	-	-
Wyo.	5	-	-	1	1	-	1	1	-	-	-
Colo.	23	18	-	1	-	2	151	201	-	-	1
N. Mex.	10	6	-	2	1	2	55	60	-	-	-
Ariz.	11	18	-	1	3	1	455	34	-	-	-
Utah	7	6	-	1	4	4	21	10	-	-	-
Nev.	4	3	U	1	3	U	9	4	U	-	-
PACIFIC	269	275	1	27	77	10	158	500	-	1	12
Wash.	41	27	1	1	2	9	56	160	-	-	7
Oreg.	20	30	N	N	N	1	13	44	-	-	-
Calif.	204	206	U	21	63	U	85	267	U	-	5
Alaska	2	4	-	1	4	-	1	7	-	-	-
Hawaii	2	8	-	4	8	-	3	22	-	1	-
Guam	-	-	U	-	7	U	-	3	U	-	1
P.R.	3	6	-	-	-	-	2	1	-	-	-
V.I.	-	-	U	-	-	U	-	-	U	-	-
Amer. Samoa	U	U	U	U	U	U	U	U	U	U	U
C.N.M.I.	-	U	U	-	U	U	-	U	U	-	U

N: Not notifiable. U: Unavailable. -: No reported cases.

TABLE IV. Deaths in 122 U.S. cities,* week ending June 16, 2001 (24th Week)

Reporting Area	All Causes, By Age (Years)						P&I† Total
	All Ages	65	45-64	25-44	1-24	<1	
NEW ENGLAND	494	349	83	38	11	12	41
Boston, Mass.	134	93	26	5	2	8	6
Bridgeport, Conn.	31	20	7	-	3	1	2
Cambridge, Mass.	26	19	4	1	-	1	2
Fall River, Mass.	28	24	4	-	-	-	3
Hartford, Conn.	63	43	6	14	-	-	7
Lowell, Mass.	30	19	5	5	1	-	-
Lynn, Mass.	15	10	4	1	-	-	-
New Bedford, Mass.	U	U	U	U	U	U	U
New Haven, Conn.	26	17	5	3	-	1	4
Providence, R.I.	U	U	U	U	U	U	U
Somerville, Mass.	2	1	-	1	-	-	-
Springfield, Mass.	39	25	7	5	1	1	5
Waterbury, Conn.	30	21	6	2	1	-	2
Worcester, Mass.	70	57	9	1	3	-	10
MID. ATLANTIC	2,244	1,596	394	164	47	43	133
Albany, N.Y.	48	31	8	5	-	4	1
Allentown, Pa.	18	14	4	-	-	-	1
Buffalo, N.Y.	97	66	22	4	1	4	13
Camden, N.J.	33	25	5	1	1	1	1
Elizabeth, N.J.	28	22	4	2	-	-	-
Erie, Pa.§	41	30	8	-	3	-	1
Jersey City, N.J.	34	25	4	5	-	-	-
New York City, N.Y.	1,149	819	204	90	22	14	59
Newark, N.J.	40	13	14	10	1	2	-
Paterson, N.J.	22	9	7	4	1	1	1
Philadelphia, Pa.	345	251	59	23	9	3	21
Pittsburgh, Pa.§	38	26	7	4	-	1	3
Reading, Pa.	18	16	1	1	-	-	2
Rochester, N.Y.	139	103	21	6	4	5	12
Schenectady, N.Y.	18	14	3	-	1	-	2
Scranton, Pa.§	30	25	3	1	1	-	1
Syracuse, N.Y.	87	63	11	4	3	6	10
Trenton, N.J.	42	30	6	4	-	2	4
Utica, N.Y.	17	14	3	-	-	-	1
Yonkers, N.Y.	U	U	U	U	U	U	U
E.N. CENTRAL	1,608	1,144	294	99	27	44	105
Akron, Ohio	48	40	5	1	-	2	2
Canton, Ohio	48	36	8	3	-	1	5
Chicago, Ill.	U	U	U	U	U	U	U
Cincinnati, Ohio	93	70	12	3	2	6	8
Cleveland, Ohio	122	77	27	8	3	7	6
Columbus, Ohio	188	135	30	19	1	3	10
Dayton, Ohio	121	91	21	4	3	2	7
Detroit, Mich.	182	117	41	16	1	7	17
Evansville, Ind.	41	30	7	2	2	-	3
Fort Wayne, Ind.	59	42	11	3	3	-	5
Gary, Ind.	17	12	3	2	-	-	1
Grand Rapids, Mich.	49	33	8	4	2	2	3
Indianapolis, Ind.	180	118	39	13	5	5	11
Lansing, Mich.	43	29	12	1	-	1	-
Milwaukee, Wis.	143	109	21	8	1	4	10
Peoria, Ill.	51	37	10	2	1	1	1
Rockford, Ill.	45	32	9	4	-	-	3
South Bend, Ind.	46	36	7	1	1	-	5
Toledo, Ohio	89	63	17	4	2	3	7
Youngstown, Ohio	44	37	6	1	-	-	1
W.N. CENTRAL	904	628	162	68	27	19	59
Des Moines, Iowa	95	78	12	3	1	1	11
Duluth, Minn.	21	15	3	3	-	-	-
Kansas City, Kans.	56	41	10	3	2	-	6
Kansas City, Mo.	82	59	16	3	1	3	5
Lincoln, Nebr.	31	23	3	5	-	-	1
Minneapolis, Minn.	215	157	35	15	3	5	15
Omaha, Nebr.	84	56	16	8	1	3	9
St. Louis, Mo.	107	52	35	10	9	1	-
St. Paul, Minn.	101	79	13	6	1	2	6
Wichita, Kans.	112	68	19	12	9	4	6
S. ATLANTIC	1,479	953	322	149	36	18	90
Atlanta, Ga.	196	116	48	25	5	2	2
Baltimore, Md.	259	164	53	34	6	2	29
Charlotte, N.C.	84	60	14	7	1	2	10
Jacksonville, Fla.	167	106	38	12	7	3	7
Miami, Fla.	117	76	23	17	-	1	9
Norfolk, Va.	37	24	9	3	-	1	2
Richmond, Va.	66	38	18	7	3	-	6
Savannah, Ga.	47	37	7	1	1	1	4
St. Petersburg, Fla.	73	53	13	4	2	1	6
Tampa, Fla.	218	153	41	17	4	3	12
Washington, D.C.	200	123	46	22	7	2	3
Wilmington, Del.	15	3	12	-	-	-	-
E.S. CENTRAL	905	623	183	59	22	17	76
Birmingham, Ala.	163	111	28	16	5	3	16
Chattanooga, Tenn.	83	59	20	-	3	1	11
Knoxville, Tenn.	94	65	22	6	1	-	7
Lexington, Ky.	79	51	19	6	1	2	1
Memphis, Tenn.	224	157	46	11	5	5	20
Mobile, Ala.	78	55	13	7	1	2	1
Montgomery, Ala.	43	29	6	4	3	1	3
Nashville, Tenn.	141	96	29	9	3	3	17
W.S. CENTRAL	1,496	946	303	138	67	40	95
Austin, Tex.	89	69	8	9	2	1	6
Baton Rouge, La.	31	17	8	4	-	2	-
Corpus Christi, Tex.	67	54	9	3	-	1	6
Dallas, Tex.	211	120	48	19	18	6	16
El Paso, Tex.	113	65	31	13	2	2	3
Ft. Worth, Tex.	117	85	19	5	7	1	5
Houston, Tex.	353	192	84	41	29	7	17
Little Rock, Ark.	64	42	15	4	2	1	2
New Orleans, La.	66	36	9	6	3	11	7
San Antonio, Tex.	224	153	46	22	1	3	14
Shreveport, La.	68	47	9	8	1	3	9
Tulsa, Okla.	93	67	18	4	2	2	10
MOUNTAIN	1,005	685	187	80	26	27	73
Albuquerque, N.M.	68	47	15	4	1	1	7
Boise, Idaho	55	38	9	2	2	4	7
Colo. Springs, Colo.	55	41	9	4	-	1	3
Denver, Colo.	111	64	24	14	3	6	8
Las Vegas, Nev.	213	153	36	20	4	-	21
Ogden, Utah	29	20	8	1	-	-	5
Phoenix, Ariz.	202	119	46	22	7	8	12
Pueblo, Colo.	21	16	5	-	-	-	2
Salt Lake City, Utah	89	65	12	6	4	2	4
Tucson, Ariz.	162	122	23	7	5	5	4
PACIFIC	1,782	1,261	339	105	48	26	153
Berkeley, Calif.	28	20	4	2	-	2	2
Fresno, Calif.	94	62	20	11	1	-	9
Glendale, Calif.	17	16	-	1	-	-	-
Honolulu, Hawaii	58	50	3	3	2	-	4
Long Beach, Calif.	74	59	9	2	3	1	8
Los Angeles, Calif.	382	274	65	19	14	10	19
Pasadena, Calif.	18	13	4	1	-	-	1
Portland, Oreg.	101	67	20	9	3	2	5
Sacramento, Calif.	191	131	38	10	8	4	28
San Diego, Calif.	187	134	37	9	2	3	24
San Francisco, Calif.	130	90	29	9	2	-	14
San Jose, Calif.	147	108	26	4	8	1	15
Santa Cruz, Calif.	45	33	9	2	-	1	4
Seattle, Wash.	139	88	36	10	3	2	8
Spokane, Wash.	60	47	10	3	-	-	7
Tacoma, Wash.	111	69	29	10	2	-	5
TOTAL	11,917¶	8,185	2,267	900	311	246	825

U: Unavailable. -:No reported cases.
*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.
†Pneumonia and influenza.
§Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.
¶Total includes unknown ages.

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